

Figure 1

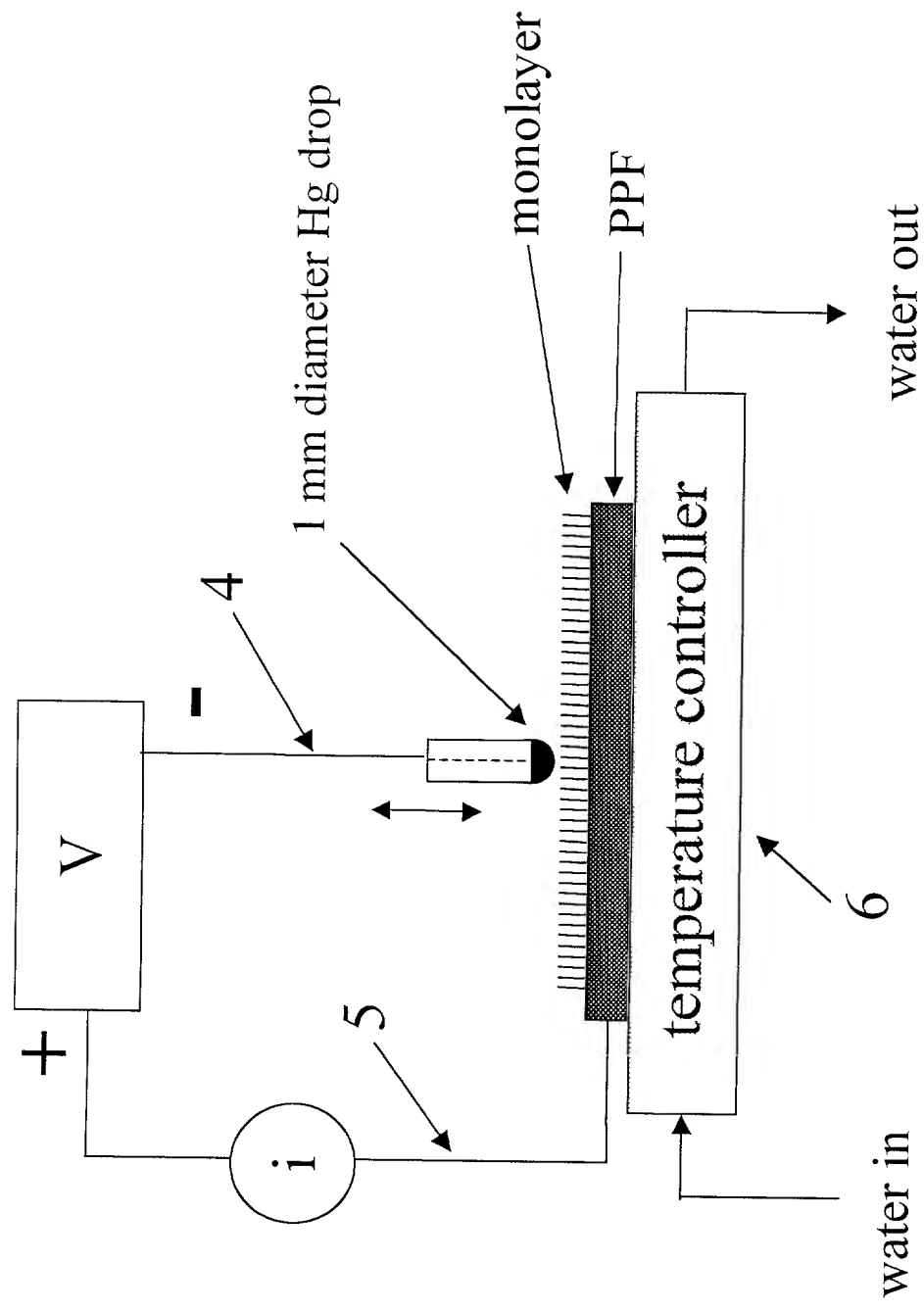


Figure 1A

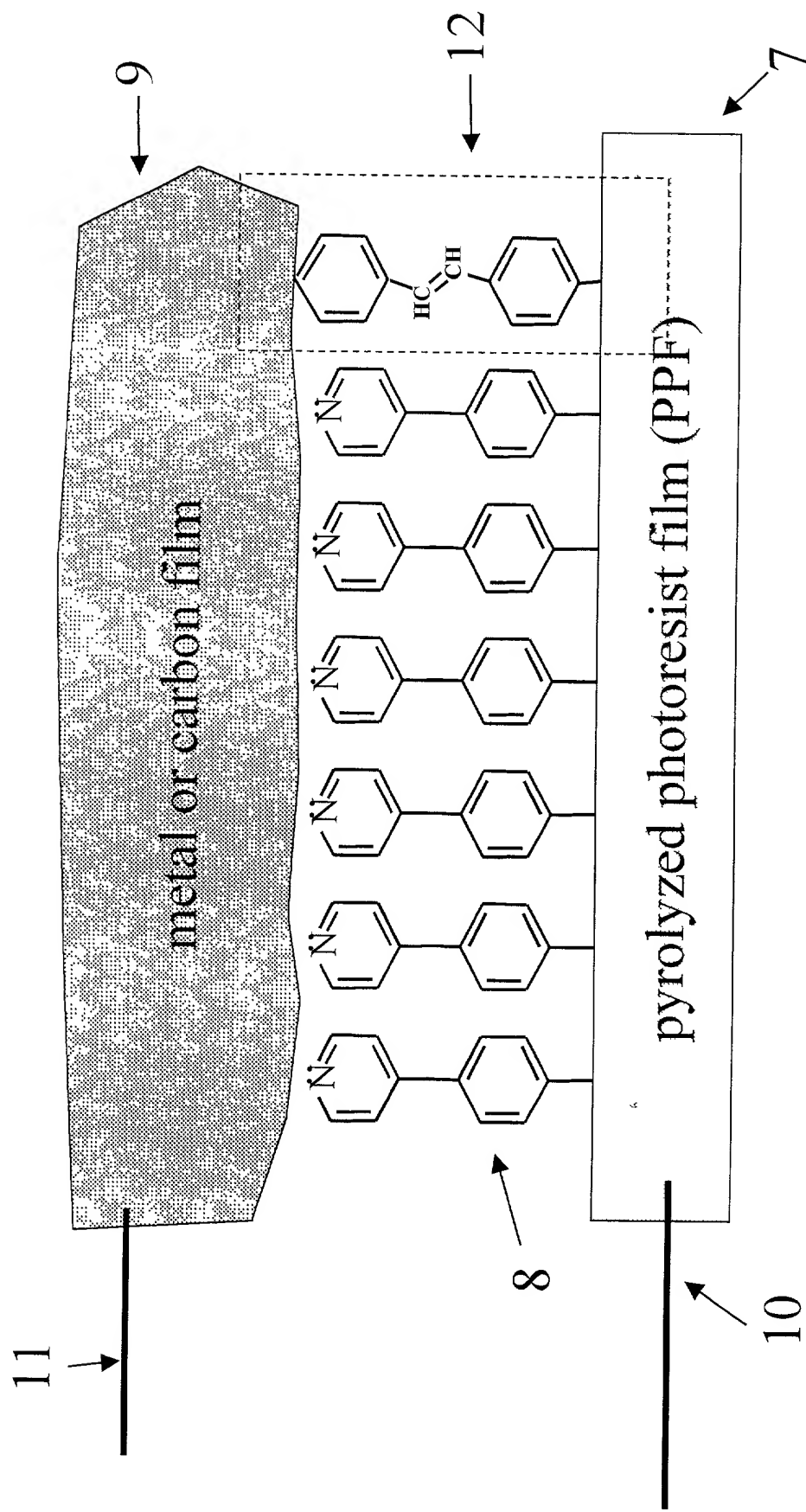


Figure 2

# Schematic molecular orbitals of individual components of molecular junction

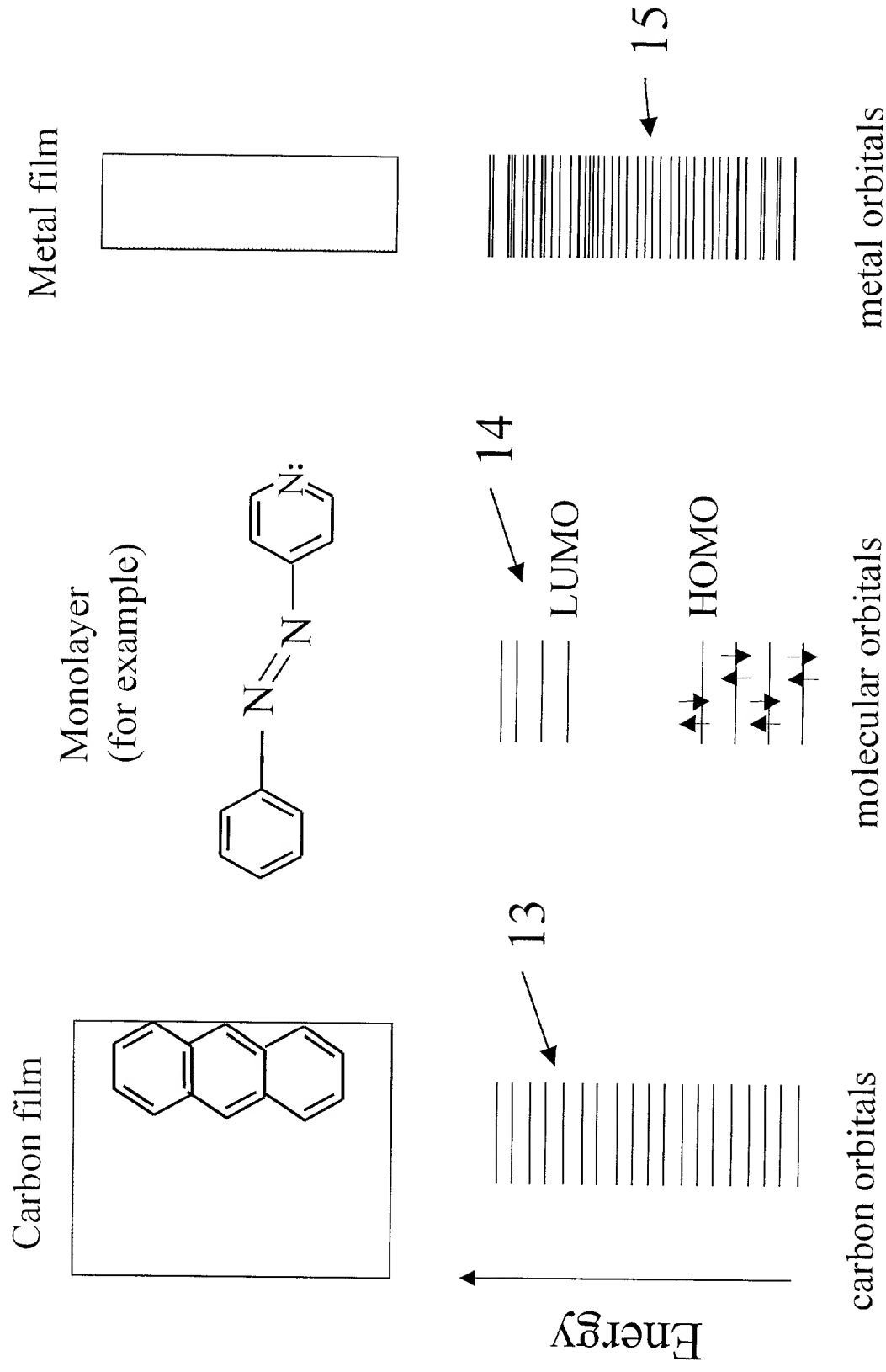


Figure 3

# Chemically bonded organic monolayer on PPF:

metal film

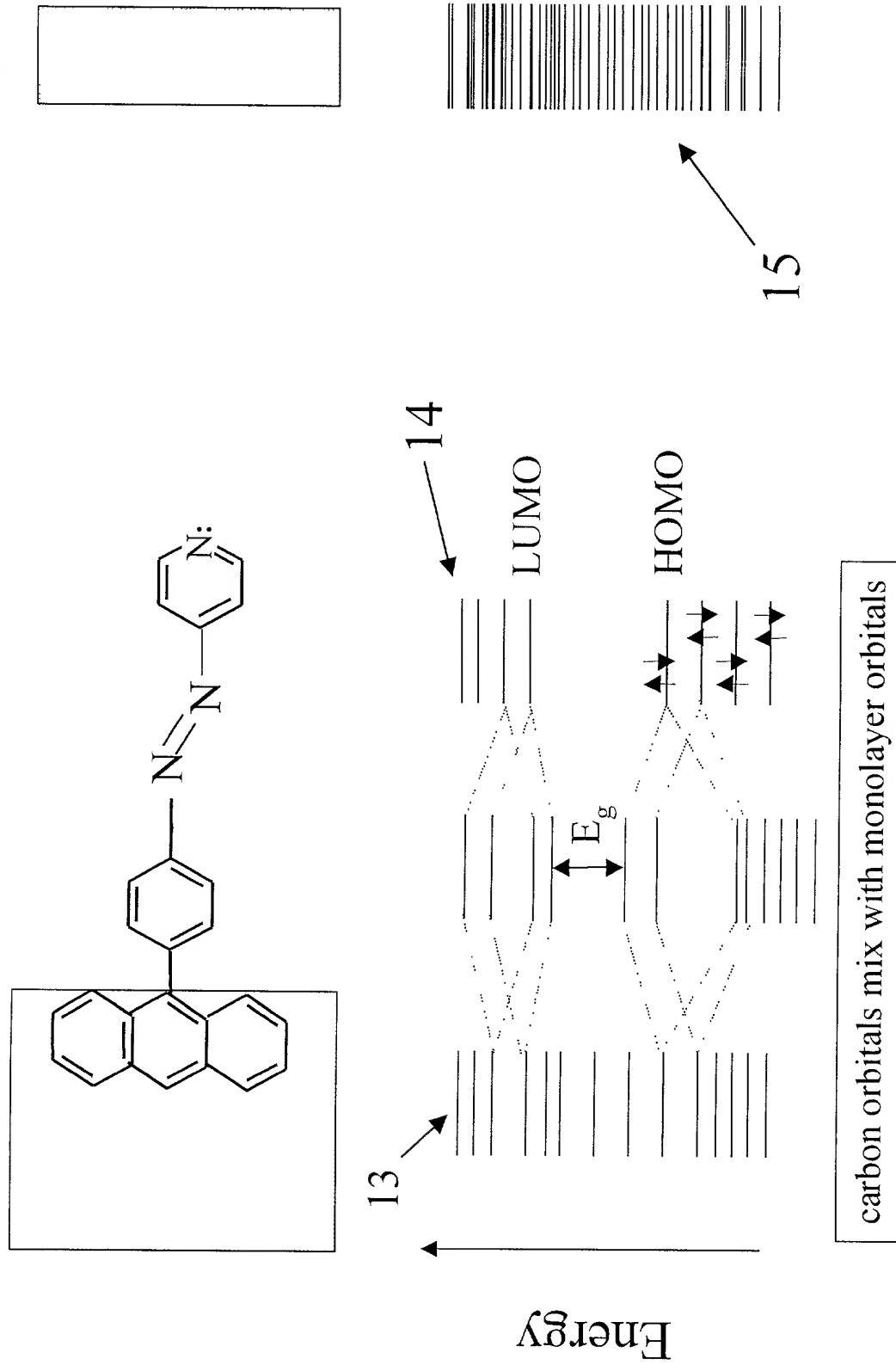


Figure 4

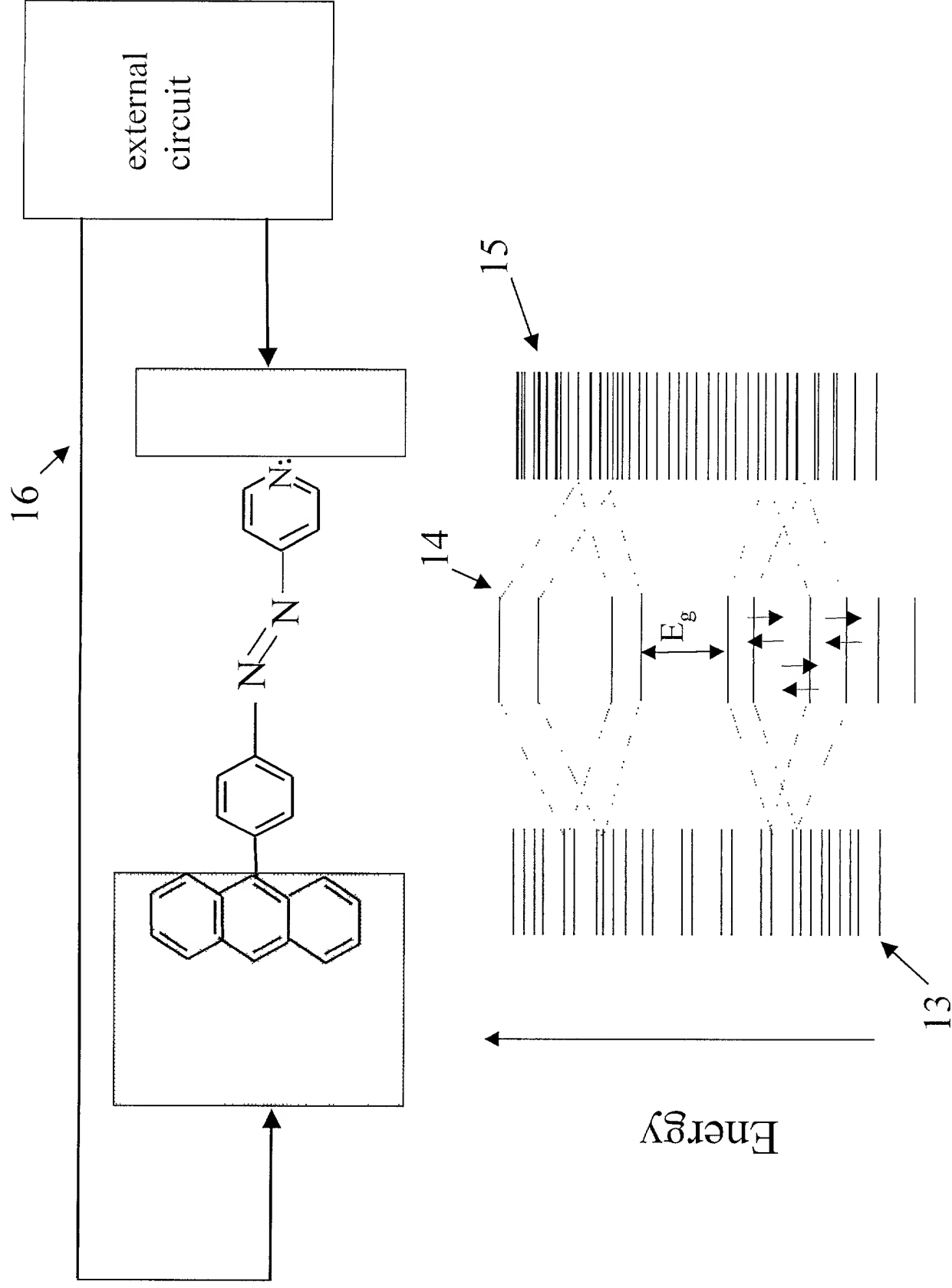


Figure 5

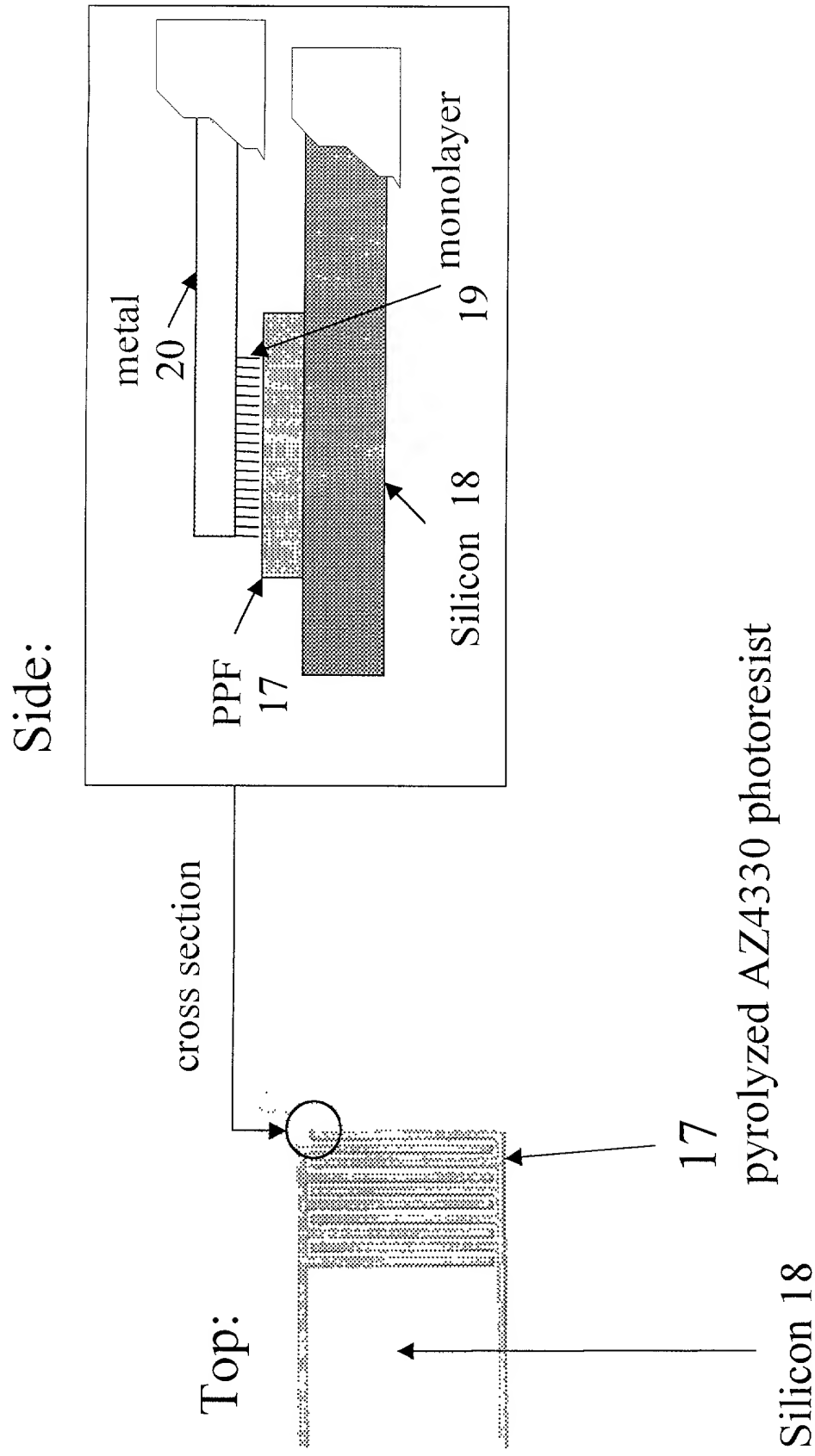
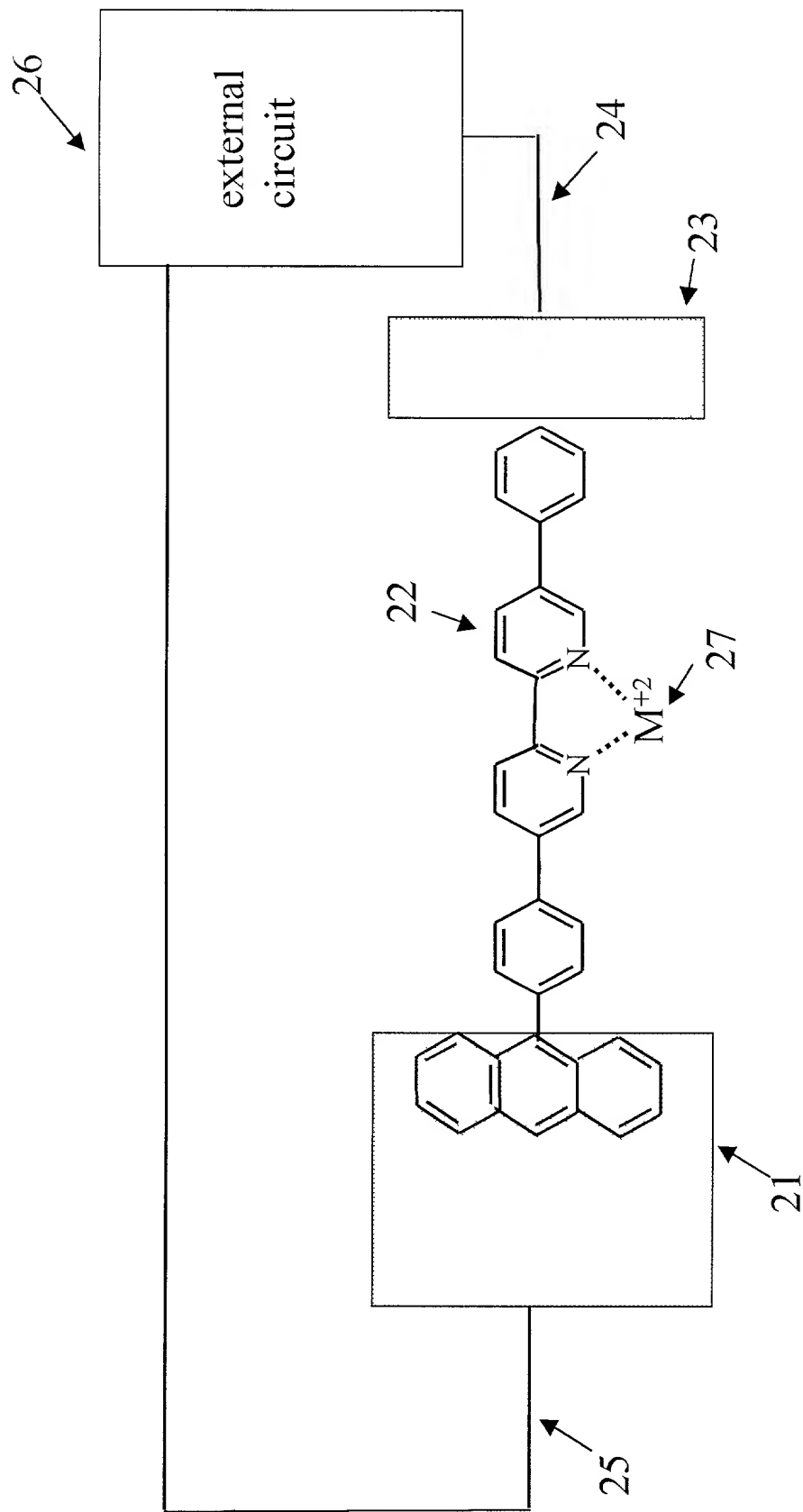


Figure 6



Presence of metal ion changes conductivity between carbon and metal films. Chemically sensitive component becomes part of the circuit.

Figure 7

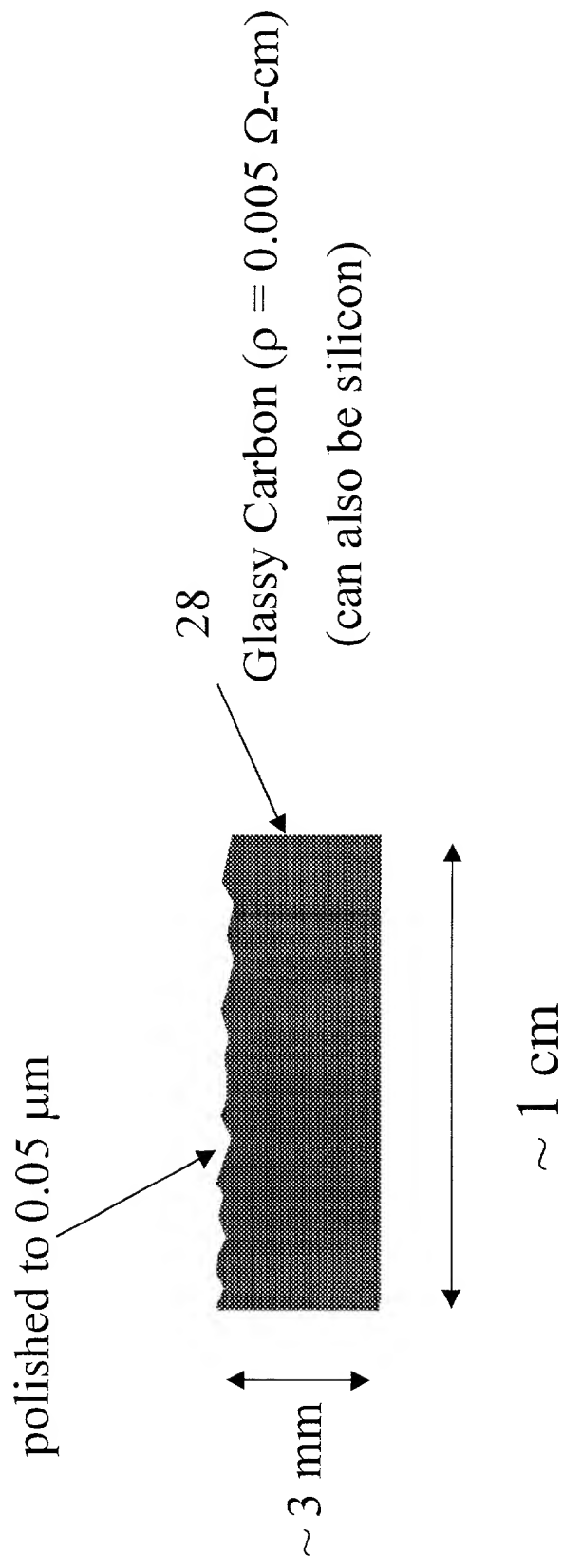
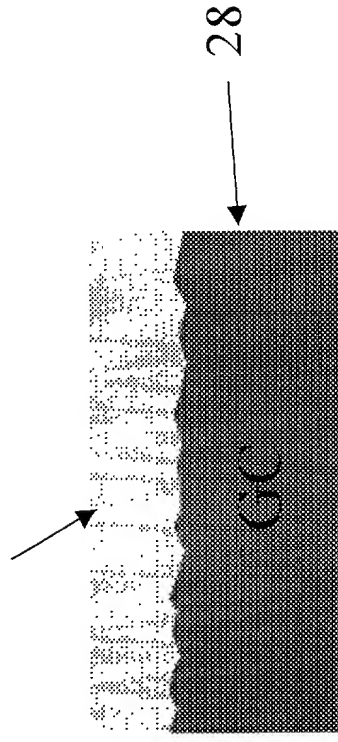


Figure 8

29 positive photoresist (AZ4330, Hoechst)



1000 °C, H<sub>2</sub>/N<sub>2</sub> atmosphere

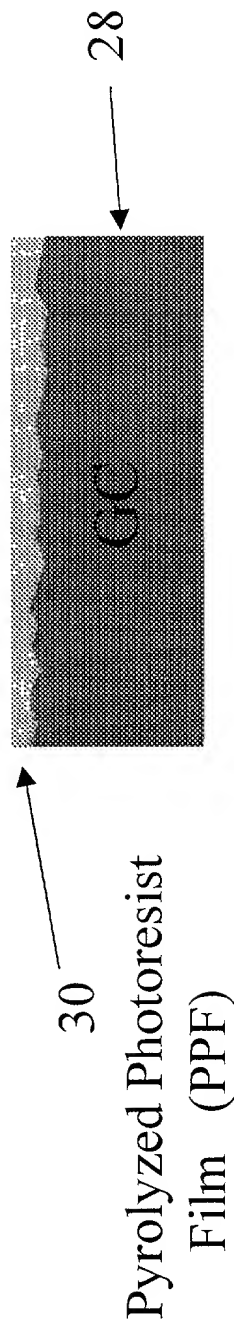


Figure 9

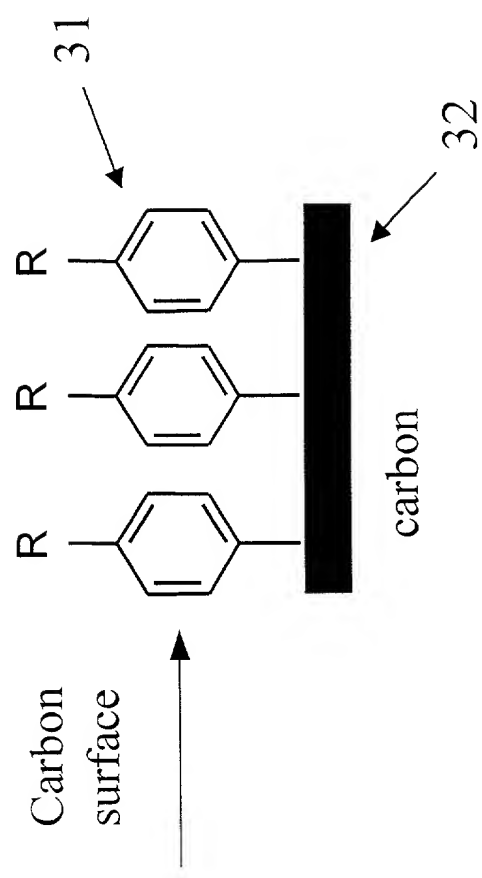
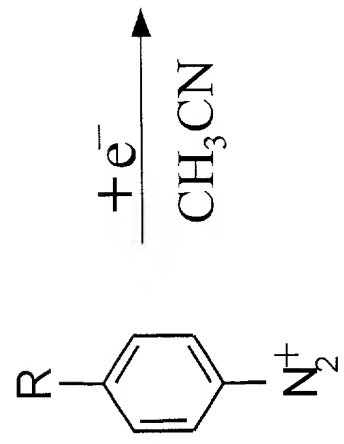


Figure 10

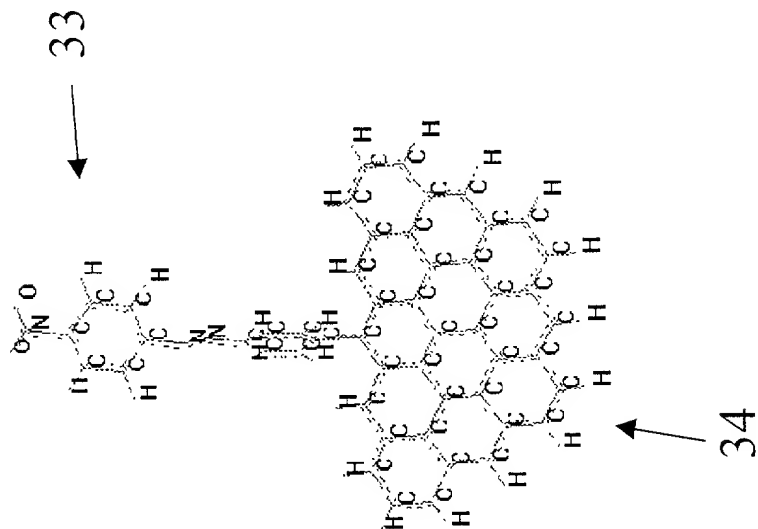
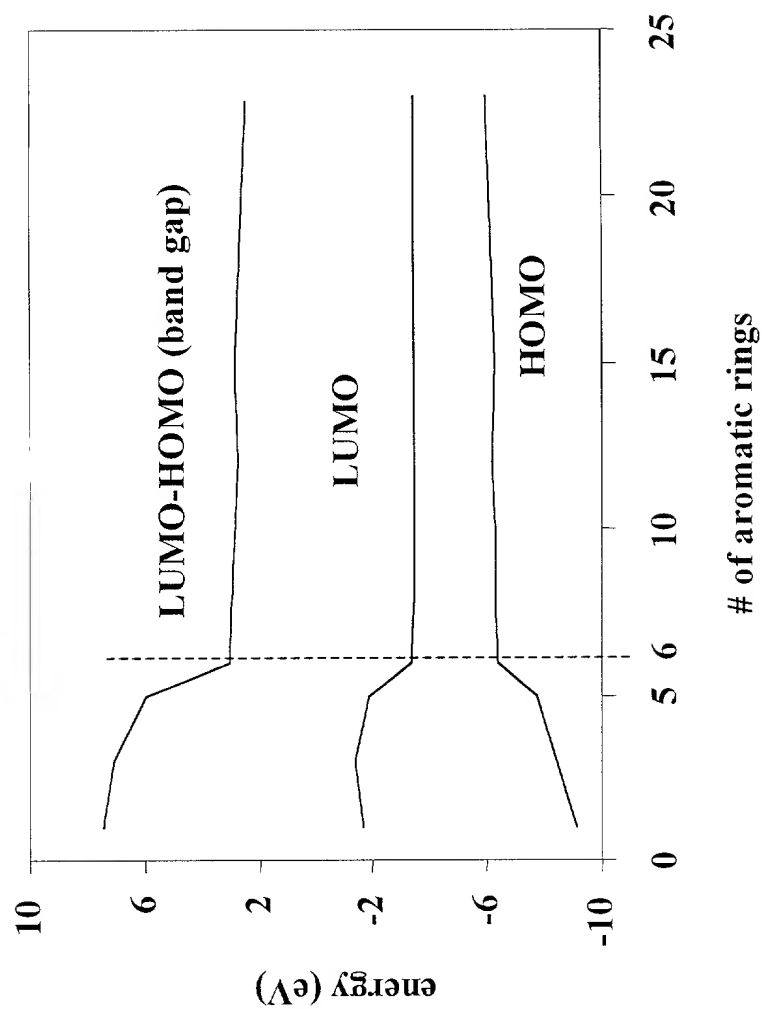


Figure 11

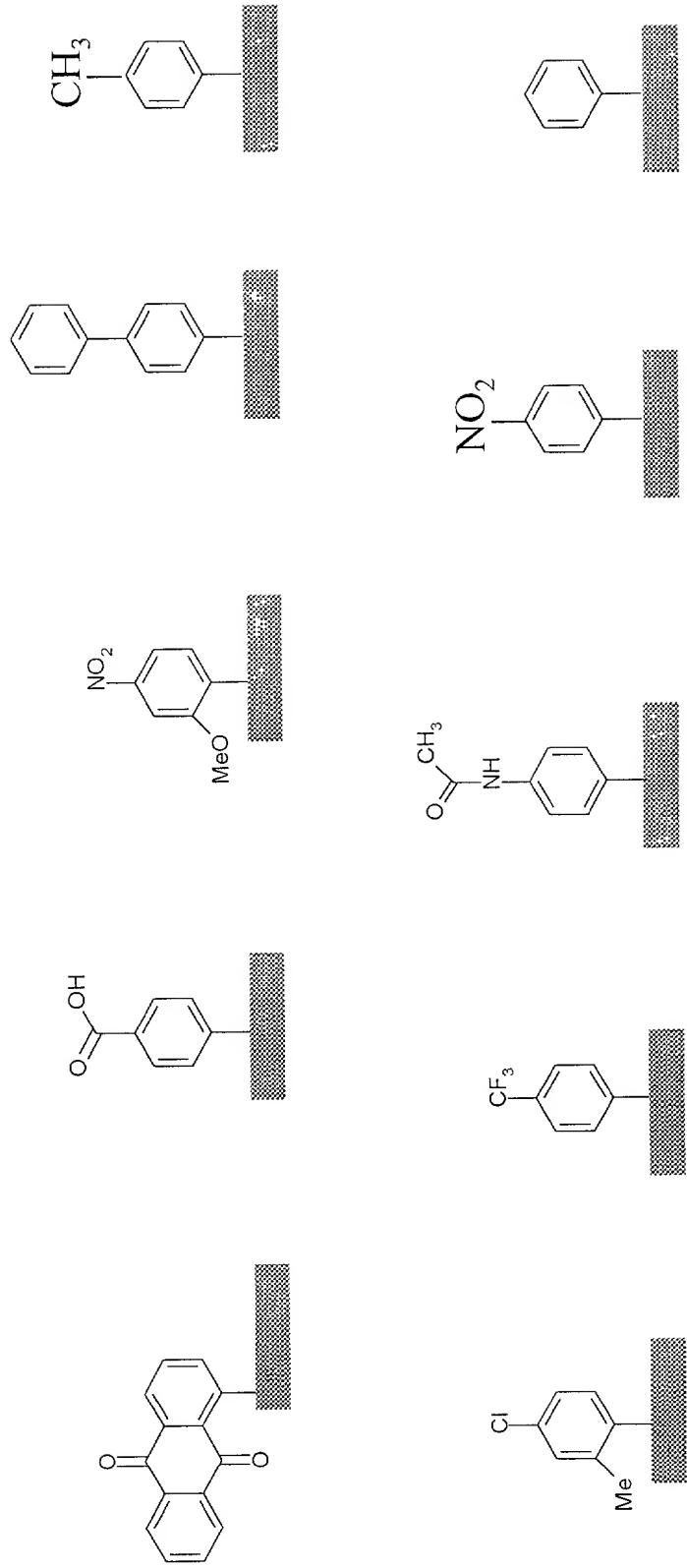


Figure 12

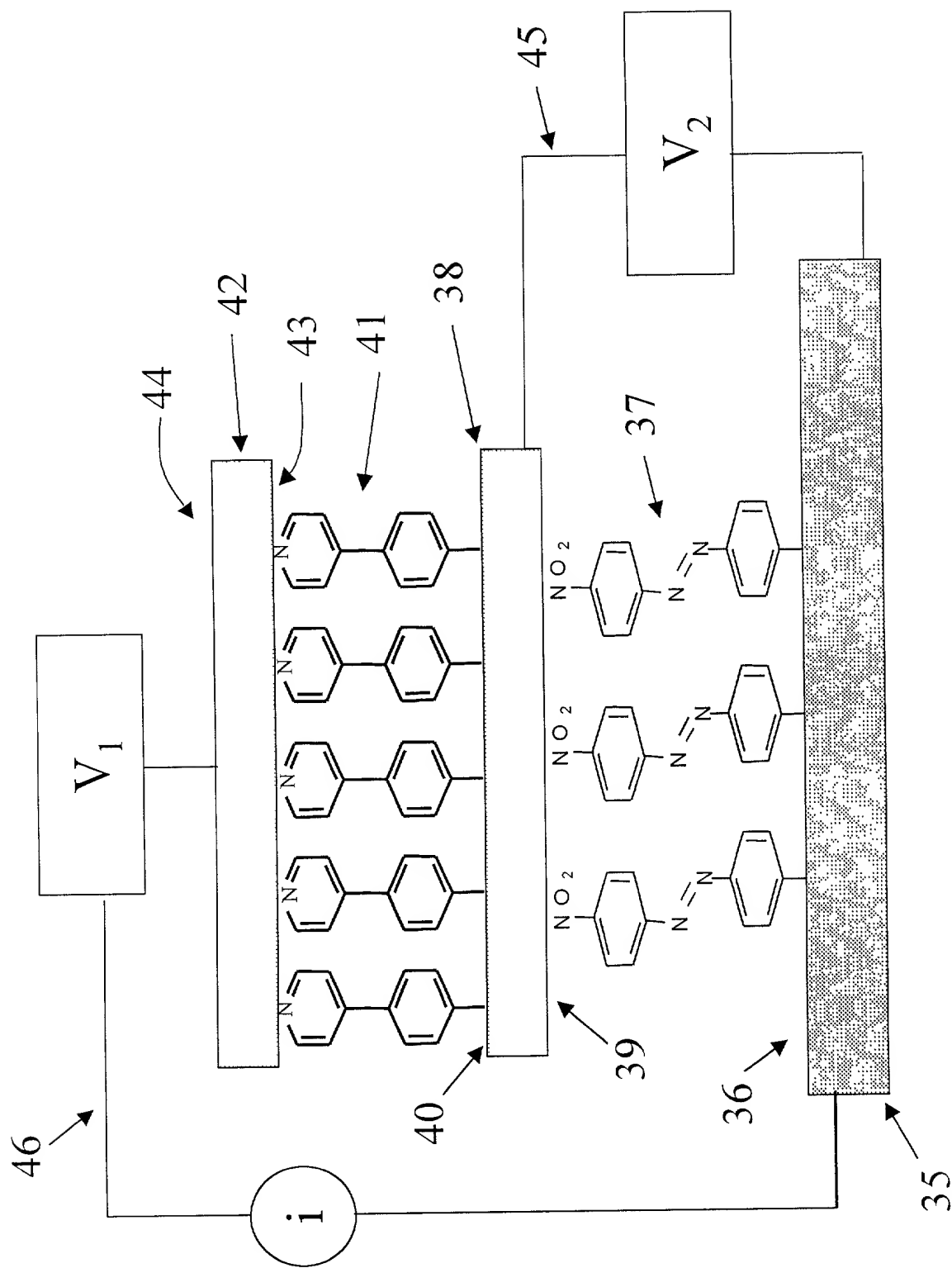


Figure 13



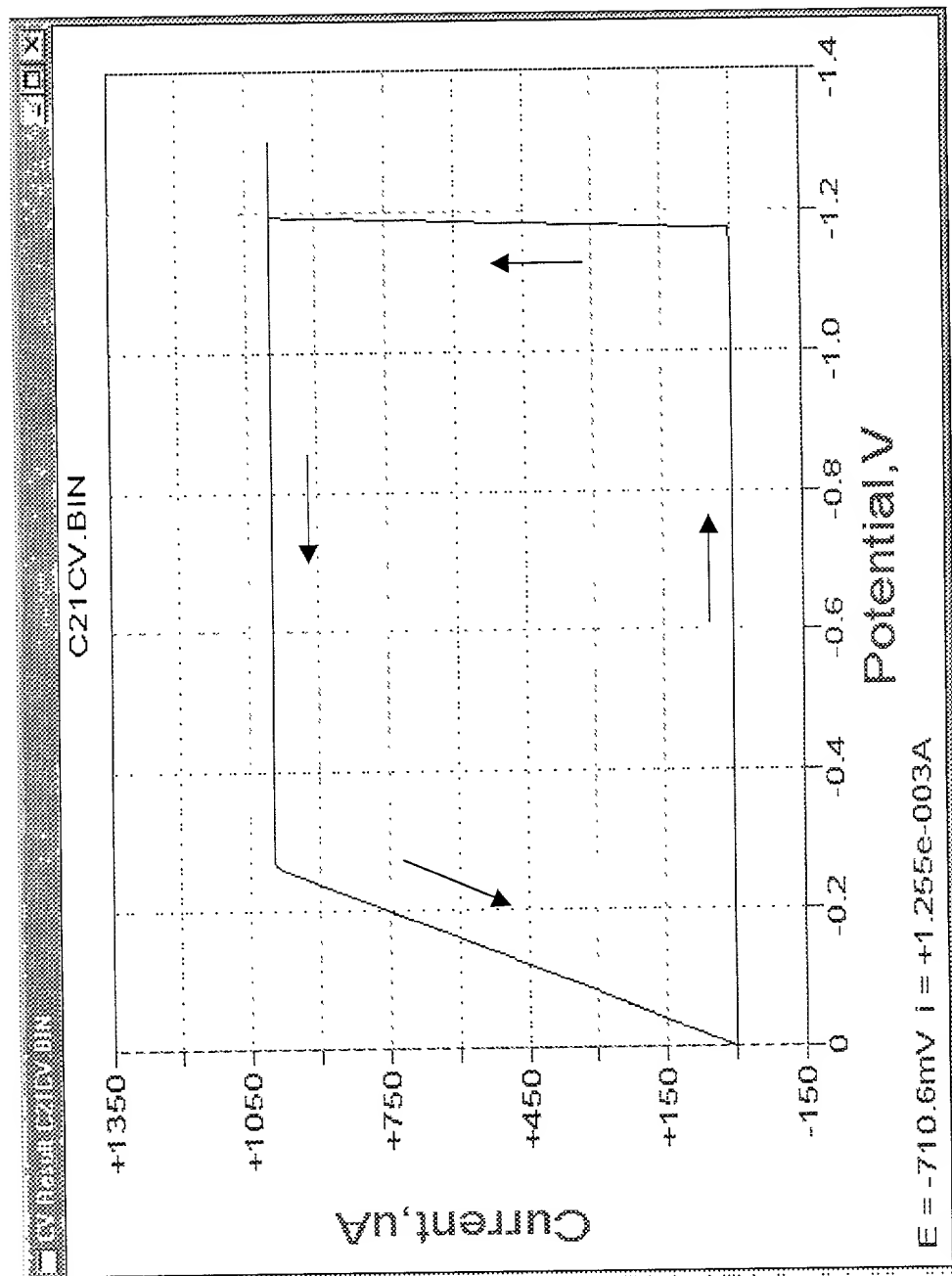


Figure 15

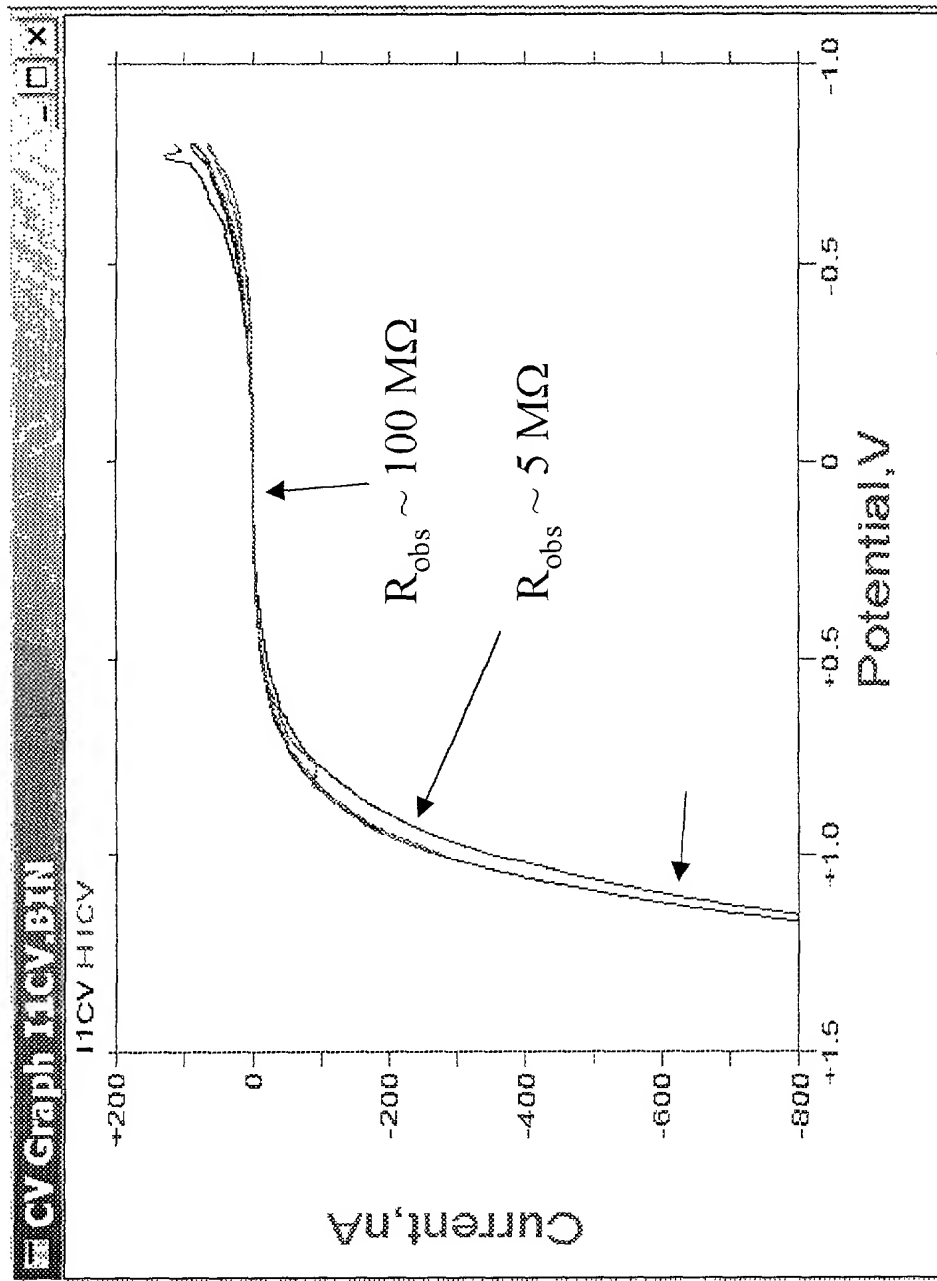


Figure 16

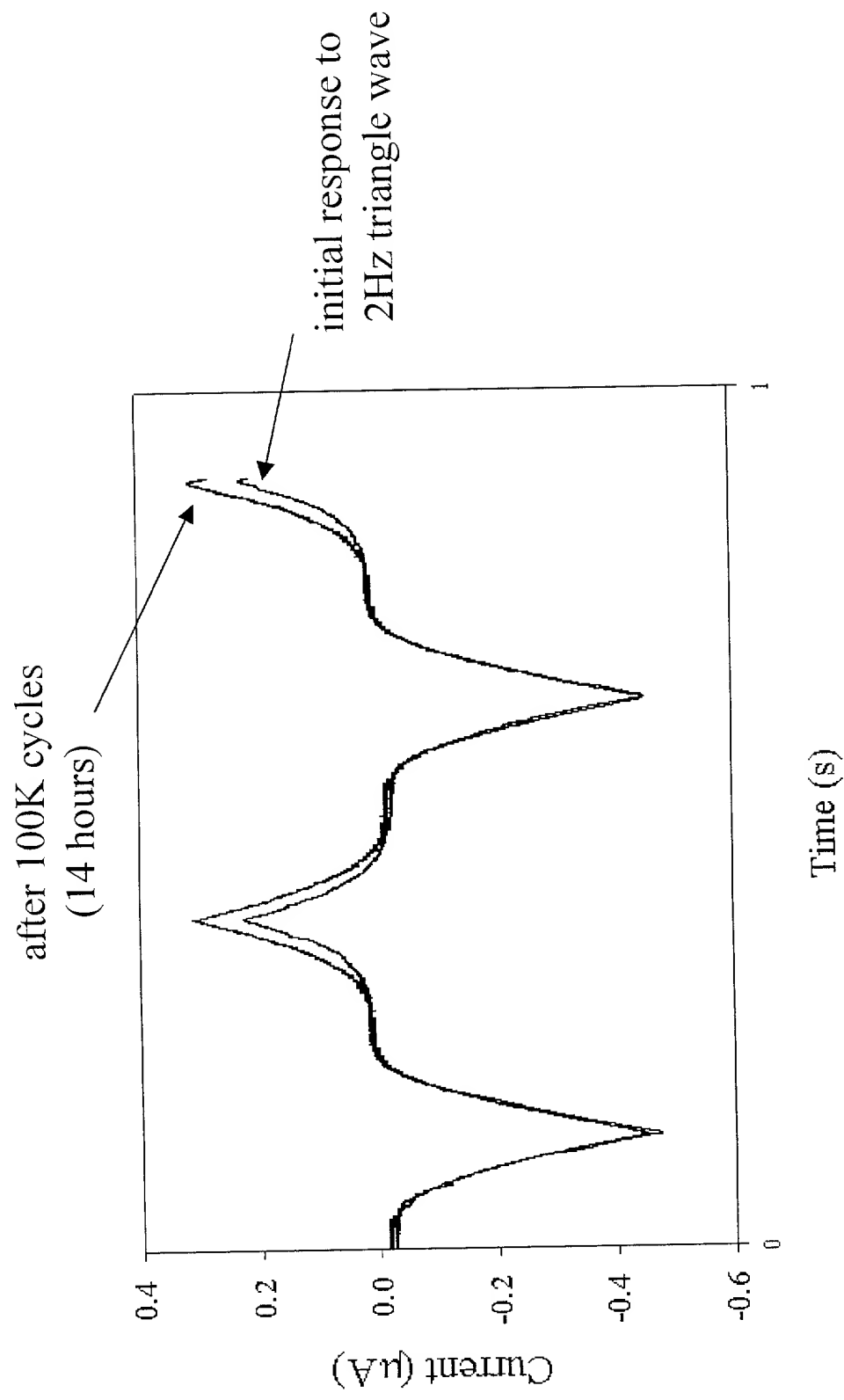


Figure 17

TOPP-0245750

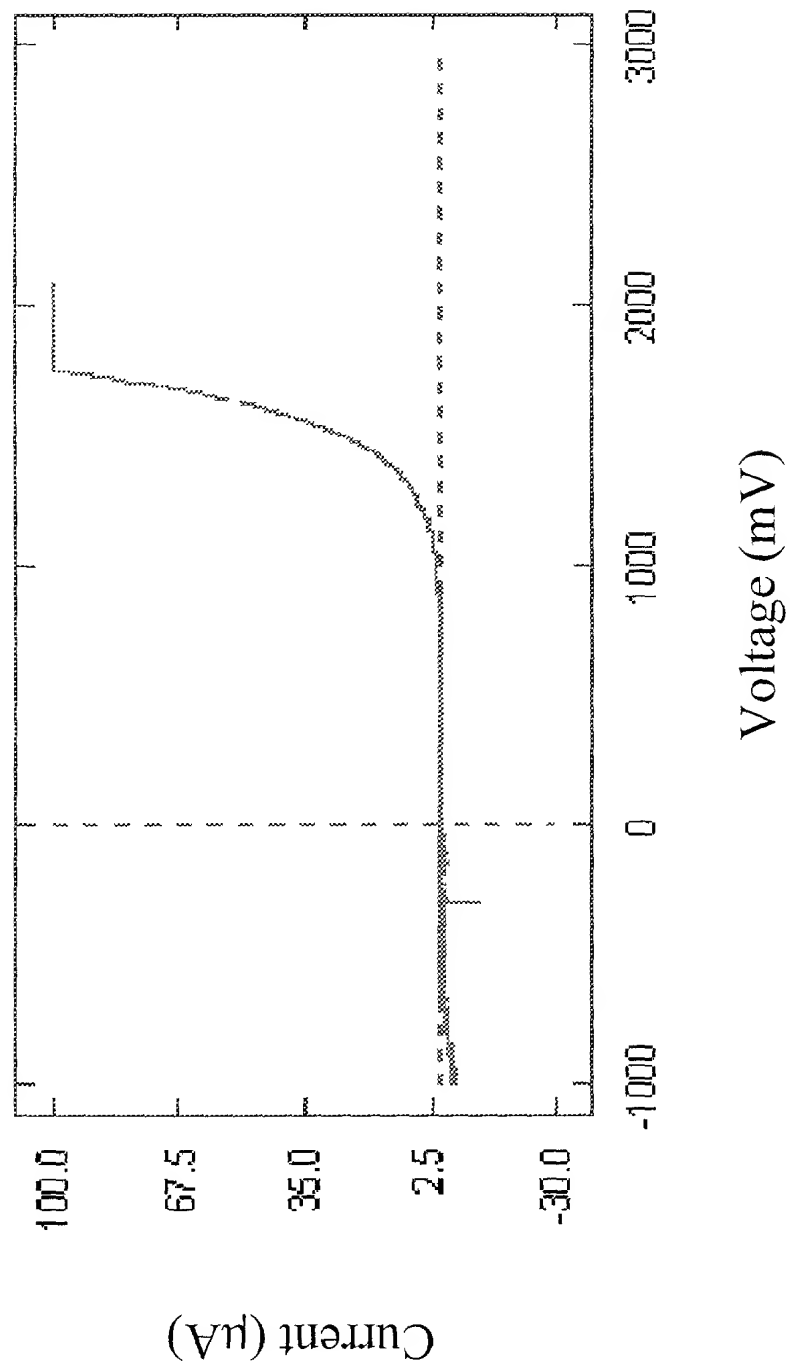


Figure 18

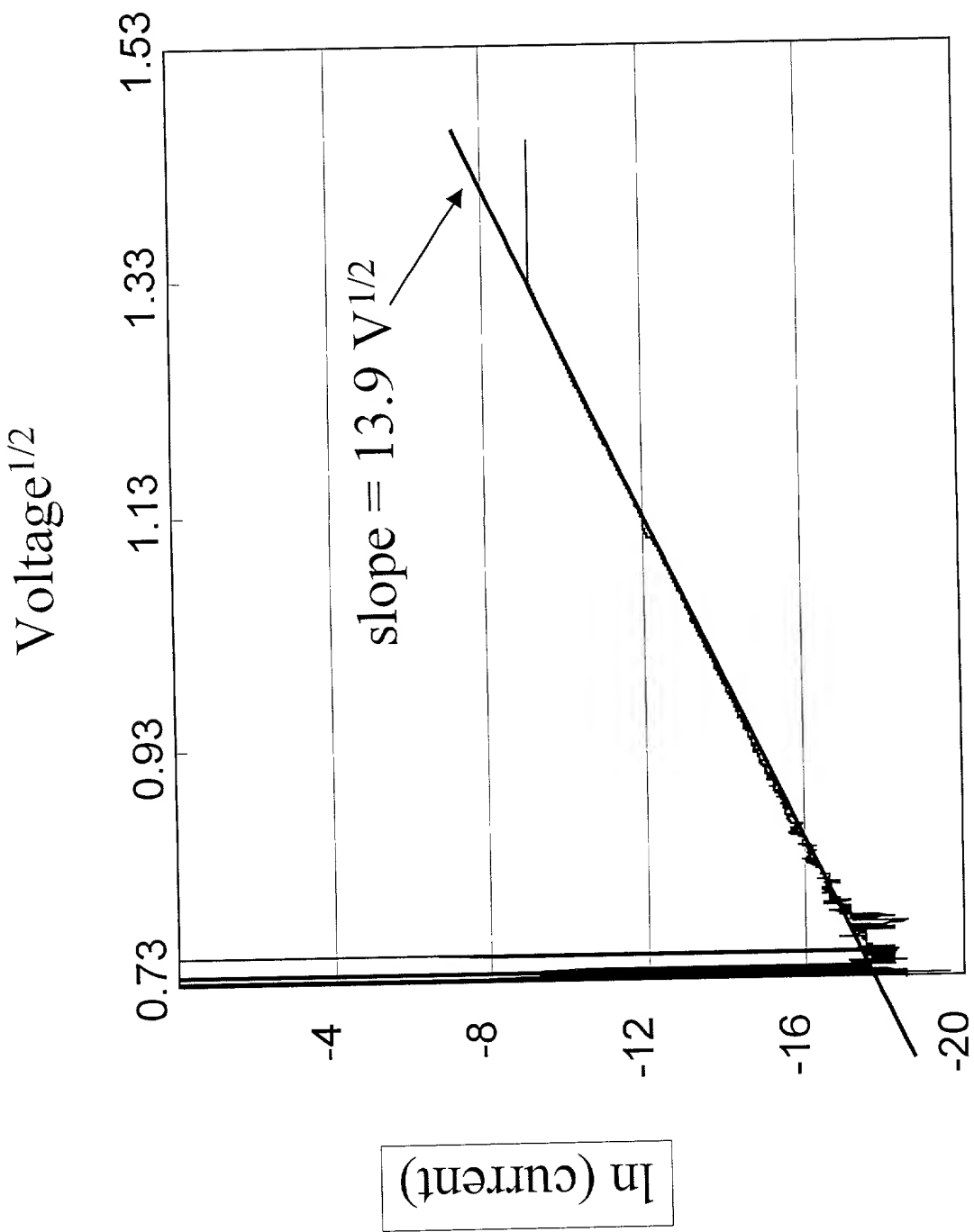


Figure 19

# memory device based on molecular monolayer

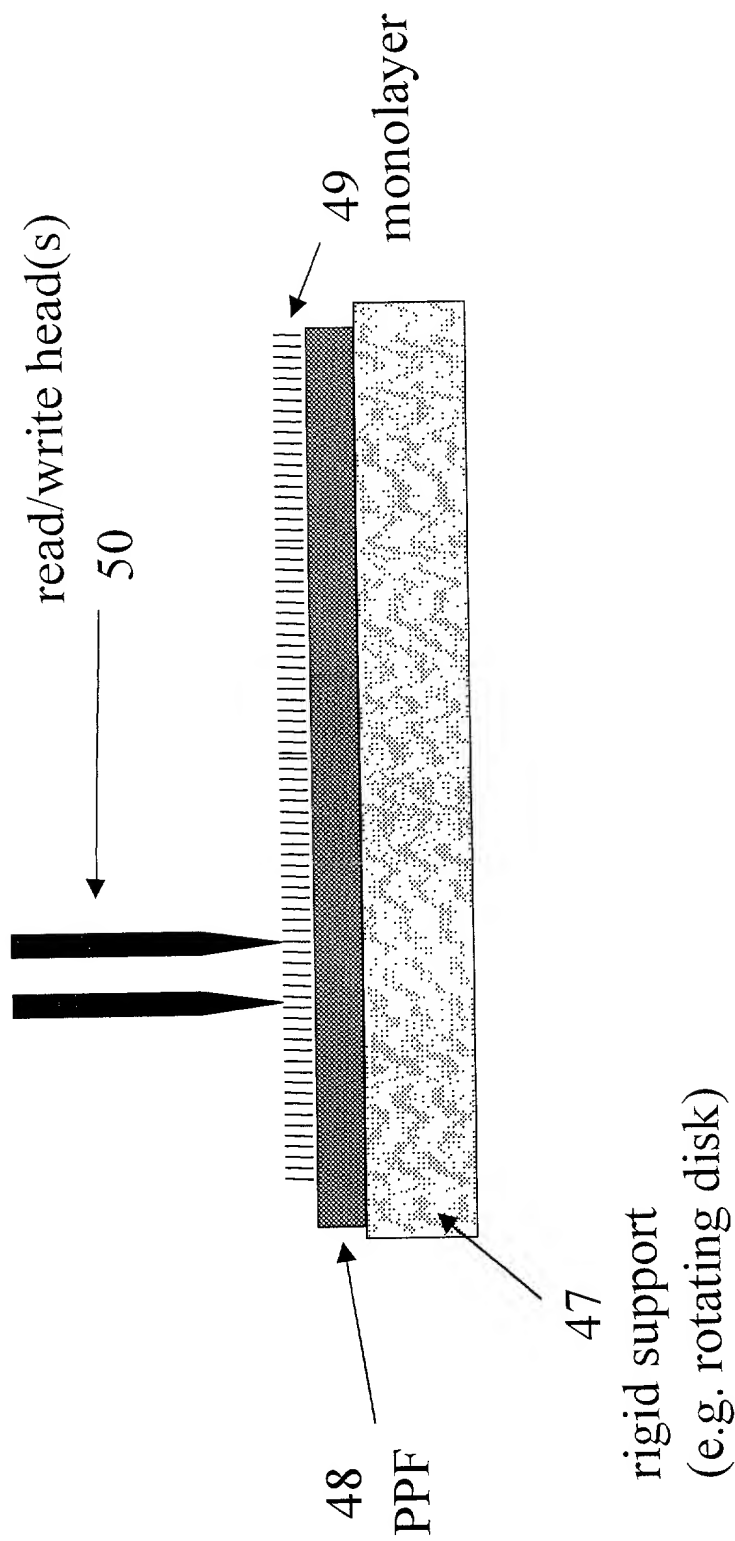


Figure 20

Flat panel display with monolayer field emitters:

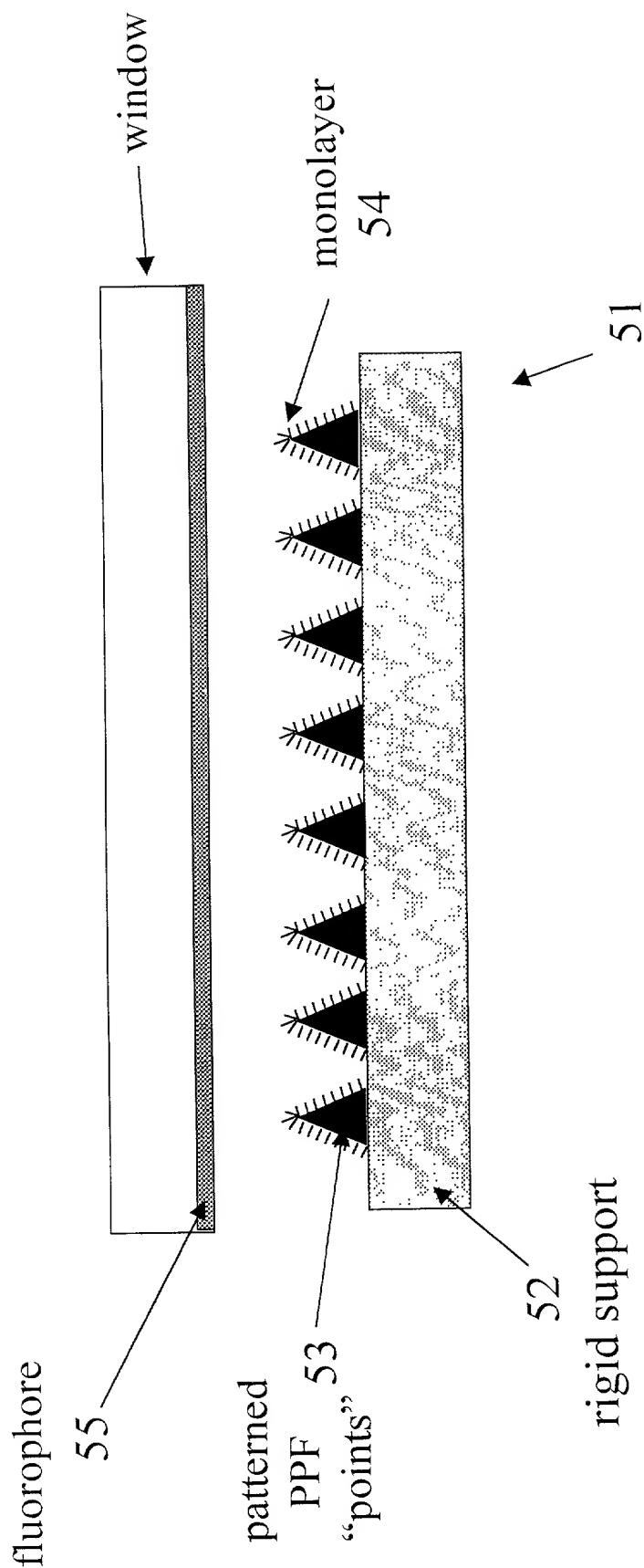


Figure 21